

What Is Claimed Is:**1. An inserter input system comprising:**

a web feeder providing a web of printed material, the web feeder feeding the web in a first direction;

a web slitting device splitting the web along the first direction into at least two portions;

a transverse web cutter cutting the portions of slit web transverse to the first direction while the web is transported through the web cutter to form side-by-side individual sheets, the individual sheets having a width in the transverse direction and a length in the first direction, the web cutter cutting sheets at a cutting rate;

a right angle turn mechanism downstream of the web cutter whereby the individual sheets are rearranged to be one on top of the other in a shingled arrangement, the right angle turn mechanism transporting individual sheets with a right angle turn transport having a first velocity, the first velocity being a function of the cutting rate multiplied by the width of the individual sheets; and

a high speed separation transport downstream of the right angle turn transport and pulling individual shingled sheets out from the shingled arrangement and whereby sheets are thereafter transported serially and separated by a predetermined gap.

2. The inserter input system of claim 1 wherein the high speed separation transport has a second velocity that is a function of the cutting rate multiplied by a sum of the length of the individual documents and the predetermined gap.

3. The inserter input system of claim 2 further comprising:

one or more sensors for scanning a code on a document processed by the inserter input system, the code indicating a number of sheets for a collation to which the document belongs, the one or more sensors further providing a position indication of the document in the inserter input system,

a controller coupled to the one or more sensors, the controller adjusting the cutting rate as a function of the number of sheets in the collation arriving at the high speed separation transport, whereby a lower number of sheets in the collation corresponds to decreasing the cutting rate, and a greater number of sheets in the collation corresponds to increasing the cutting rate.

4. The inserter system of claim 2 wherein the right angle turn mechanism comprises parallel forty five degree turning bars further comprising a first turning bar forming an inner paper path having a first turning path length, and a second turning bar forming an outer paper path having second turning path length, the second turning path length being longer than the first turning path length.

5. The inserter system of claim 4 wherein the first and second turning bars are spaced apart as a function of the individual sheet length such that the shingling

arrangement comprises the sheets transported on the inner paper path being positioned at the bottom of the shingling arrangement and sheets transported on the outer paper path being positioned on the top of the shingling arrangement.

6. The inserter system of claim 2 wherein the right angle turn transport is controlled to decelerate to a stop and hold sheets upon an occurrence of a downstream stopping condition.

7. The inserter system of claim 2 wherein the transverse web cutter is a rotary cutter.

8. A method for generating sheets from a continuous web for creating mail pieces, the method comprising:

feeding a web of printed material in a first direction;

splitting the web along the first direction into at least two portions, the at least two portions each having a document width;

cutting the portions of slit web transverse to the first direction at a cutting rate to form side-by-side individual sheets, the individual sheets each having a document length;

transporting the individual sheets at a first velocity and turning the side-by-side sheets at a right angle whereby the individual sheets are rearranged to be one on top of the other in a shingled arrangement, the first velocity being a function of the cutting rate multiplied by the document width; and

pulling individual shingled sheets out from the shingled arrangement at a second velocity whereby sheets are thereafter transported serially and separated by a predetermined gap.

9. The method of claim 8 wherein the second velocity is a function of the cutting rate multiplied by a sum of the document length and the predetermined gap

10. The method of claim 9, further including the steps of

scanning a code on a document, the code indicating a number of sheets for a collation to which the document belongs,

sensing a position of the scanned document and providing a position indication of the document,

adjusting the cutting rate as a function of the number of sheets in the collation prior to the step of pulling individual sheets out of the shingled arrangement, whereby a lower number of sheets in the collation corresponds to decreasing the cutting rate, and a greater number of sheets in the collation corresponds to increasing the first velocity.

11. The method of claim 9 wherein the step of transverse cutting is carried out using a rotary cutter device.